

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6 1445 ROSS AVENUE, SUITE 1200 DALLAS, TX 75202-2733

SEP 2 1 2009

## **MEMORANDUM**

SUBJECT: Documentation of Approval of a Removal Action and After Action Report at the

Dallas Mystery Drum Site, Dallas, Dallas County, Texas

**FROM**: Gregory E. Fife, Senior On-Scene Coordinator

Removal Site Team (6SF-PR)

**TO**: File

#### I. PURPOSE

This memorandum documents the approval for a Removal Action pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, 42 U.S.C. §§9601 et seq., at the Dallas Mystery Drum Site, located in Dallas, Texas.. The action included the removal and offsite disposal of drums dumped on the property. This action was initiated using the delegation of authority Chapter 14, Number 2, CERCLA Response, and subsequent Region 6 delegation for On-Scene Coordinator authority to approve responses up to \$250,000 for emergency situations.

This action meets the criteria for initiating a removal action under the National Contingency Plan (NCP), 40 CFR §300.415. This action required less than twelve months and \$2,000,000 to complete.

#### II. SITE CONDITIONS AND BACKGROUND

Cerclis # TXN000606865

Category of Removal: Classic Emergency

Site ID #A6F4

Latitude: 32° 52.21' N Longitude: 96° 55.00' W

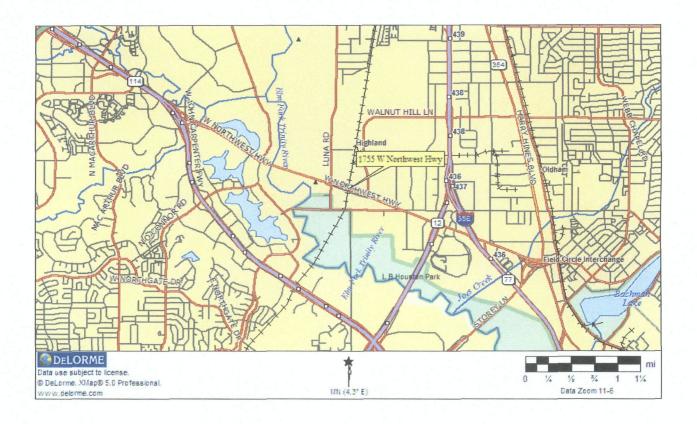
## A. Site Description

#### 1. Removal Site Evaluation

EPA responded to a request for assistance from the City of Dallas to investigate and possibly take action at the report of drums dumped on property. Six drums were found dumped at the edge of the road. The road is heavily traveled during rush hours but has little traffic during the rest of the day. The Site is the right-of-way and drive-way to an inactive business. It is not apparent what the operation was at the Site but it does appear that it is not associated with the drums. The drums were scattered where the drive-way met the road. Some were on their sides. There were leaks visible coming from the drums. In addition to the drums, there were several piles of trash and debris that were clearly dumped there.

## 2. Physical Location

The Site is located at 1755 West Northwest Highway, Dallas, TX 75220. The Site is on the north service road to the Highway. It is less than one-half mile to the East Fork of the Trinity River.





#### 3. Site Characteristics

The facility adjacent to the dump location is an inactive business. It is currently for sale. It is clear that it is not connected to the dumped drums. The drums were immediately adjacent the road. A Dallas Area Rapid Transit bus stop is approximately 100 feet away. The Trinity River is less than a half-mile from the location and the Site is in a flood plain. The nearby businesses are elevated or take other provisions to handle frequent flooding events.





4. Releases or threatened release into the environment of a hazardous substance, pollutant or contaminant

The drums contained various wastes and expired product. The product contains 1,1,1,-trichloroethane, also known as methyl chloroform. It is used as a foam adhesive and is the chemical of concern with the mobile homes and travel trailers provided to residents and responders to Hurricane Katrina. 1,1,1,-trichloroethane is a designated hazardous substance as defined in Section 101(140 of CERCLA, 42 U.S.C. §9601(14), and 40 CFR §302.4. TCE is a

hazardous constituent under 40 C.F.R. Part 261. (See Attachment 1, Material Safety Data Sheet for the Swift Adhesive containing 1,1,1,-trichloroethane and Attachment 2, ATSDR ToxFAQ)

5. NPL Status

The Site is not on the NPL list and is not likely to be included.

6. Maps, Pictures and other graphic representations

Attachment 1 Material Safety Data Sheet for Swift Adhesives

Attachment 2 Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQ for 1,1,1,-trichloroethane

# III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

#### A. Threats to Public Health or Welfare

The conditions at the Site met the following factors which indicate that the Site is a threat to the public health, welfare and the environment and a removal action is appropriate under Section 300.415(b)(2) of the National Contingency Plan. Any or all of these factors may be present at the Site yet any one of these factors may determine the appropriateness of a removal action.

1. Actual or Potential Exposure to Nearby Populations, Animals, or the Food Chain From Hazardous Substance or Pollutants or contaminants. NCP Section 300.415(b)(2)(i)

The hazardous materials were leaking from the drums. People could come into contact with the materials as they walked along the right-of-way.

2. Hazardous Substances or Pollutants or Contaminants in Drums, Barrels, Tanks or Other Bulk Storage Containers That May Pose a Threat of Release. NCP Section 300.415(b)(2)(iii)

The drums of the materials were leaking at the time of the assessment. Spilled material was obvious around the drums.

3. Weather Conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released. NCP Section 300.415(b)(2)(v)

The Site is in a flood plane and the Trinity river is close by. Heavy rains could have carried the drums to the river or caused them to release their contents. The movement of the drums by flooding could have resulted in failure of the drums and substantially greater exposure potential.

#### IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances, pollutants or contaminants from this Site, if not addressed by implementing the response action in this Action Memorandum, may present an imminent and substantial endangerment to the public health, welfare, or the environment.

#### V. ACTIONS AND ESTIMATED COSTS

## A. Actions Taken

## 1. Action Description

EPA collected the information from the drums and contacted the manufacturer of the chemicals, Reichhold Chemicals, Inc. Reichhold volunteered to investigate and they indicated that they could possibly find the Responsibly Party. Reichhold responded and picked up the drums with the expired adhesives. They indicated that they would have a conversation with their customer about responsibility and dumping.

The remaining drums were removed by EPA. The drums were not sound and were leaking when first investigated. They were overpacked, retrieved and then sent to an approved disposal facility. The spilled material and contaminated soil was removed and disposed of similarly with the investigation derived wastes.

## 2. Contribution to remedial performance

It is anticipated that no remedial action well take place at the Site. If any remedial action should occur the proposed action is consistent with the remedial action as it removes the source of the contamination.

## 3. Description of alternative technologies

Removal of the chemicals and proper disposal or recovery is the viable option.

## 4. Applicable or relevant and appropriate requirements (ARAR)

This removal action will be conducted to eliminate the actual or potential exposure to hazardous substance, pollutant or contaminant to the environment, pursuant to CERCLA, 42 U.S.C. §9601 et seq., and in a manner consistent with the National Contingency Plan (NCP), 40 CFR Part 300, as required at 33 U.S.C. §1321(c)(2) and 42 U.S.C. §9605. Pursuant to 40 CFR Part 300.415(j), fund-financed removal actions under CERCLA §104 and removal actions pursuant to CERCLA §106 shall, to the extent practicable considering the exigencies of the situation, attain the applicable or relevant and appropriate requirements under Federal environmental law.

## **B.** Estimated Costs

## **Extramural Costs**

Cleanup Contractor	\$1,558.20
START	
•	•
TOTAL ESTIMATED COST	\$4.268.98

# VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

If this had not been taken the chemicals would have been available to anybody entering the Site. It is likely that the drums could have been swept into the Trinity River, doing both ecological harm and posing threats to the public. Human exposure would increase.

#### VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues associated with this site.

#### VIII. ENFORCEMENT

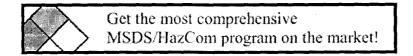
The total cost for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be \$13.332.36.

(Direct Cost) + (Other Indirect Costs) + 42.14%(Direct + Indirect Costs) = Estimated EPA Cost \$4,268.98 + \$5,110.76 + 0.4214(\$4,268.98 + \$5,110.76) = \$13,332.36 Direct costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rated expressed as a percentage of site-specific direct costs, consistent with the full cost accounting methodology effective October 2, 2002. The estimates do not include pre-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only, and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor the deviation of actual total costs from this estimate will affect the United States' right to cost recover.

Based on a September 3, IFMS report, the un reconciled cost totaled \$16,101.66. That includes the investigatory costs by the START contractor and the OSC. It does not include the calculated indirect costs.

# **ATTACHMENT 1**

Material Safety Data Sheet for Swift Adhesives



## **Material Safety Data Sheet**

SECTION I - Material Identity

SECTION II - Manufacturer's Information

SECTION III - Physical/Chemical Characteristics

SECTION IV - Fire and Explosion Hazard Data

SECTION V - Reactivity Data

SECTION VI - Health Hazard Data

SECTION VII - Precautions for Safe Handling and Use

SECTION VIII - Control Measures

SECTION IX - Label Data

SECTION X - Transportation Data

SECTION XI - Site Specific/Reporting Information

SECTION XII - Ingredients/Identity Information

#### **SECTION I - Material Identity**

Item Name

Part Number/Trade Name

NON-FLAMMABLE FOAM ADHESIVE 17948

National Stock Number 8040L412255F

CAGE Code

<u>59997</u> A

Part Number Indicator

9359

MSDS Number HAZ Code

В

#### **SECTION II - Manufacturer's Information**

Manufacturer Name

SWIFT ADHESIVES DIV OF REICHHOLD

CHEMICALS, INC

Emergency Phone

800-424-9300 INFO:708-971-6816

#### **MSDS Preparer's Information**

Date MSDS Prepared/Revised

NONE

Active Indicator

N

## Alternate Vendors

#### **SECTION III - Physical/Chemical Characteristics**

Specification Number

N/R

Boiling Point

162 F

Container Pressure Code

4

Temperature Code

8

Product State Code

U

#### **SECTION IV - Fire and Explosion Hazard Data**

Flash Point Method

Materials to Avoid

UNK

#### **SECTION V - Reactivity Data**

Stability

Stability Conditions to Avoid INCOMPATIBLE MATERIALS, OPEN

FLAME, WELDING ARCS OR OTHER HIGH TEMP

SOURCES CAUSING THERMAL DECOMPOSITION

MAGNESIUM, ZINC, & ALLOYS, STRONG

OXIDIZERS, NITRATES, STRONG ALKALI &

SOLVENTS SUCH AS ACETONE

Hazardous Decomposition Products CARBON MONOXIDE, CARBON DIOXIDE, HYDROGEN

CHLORIDE, CHLORINE & POSSIBLE TRACES OF

PHOSGENE

N/R

LD50 - LD50 Mixture

#### SECTION VI - Health Hazard Data

Route of Entry: Skin YES Route of Entry: Inhalation

Health Hazards - Acute and Chronic CHRONIC HEALTH HAZARD & TARGET ORGAN

EFFECTS: CHRONIC OVEREXPOSURE CAN RESULT

IN LIVER/KIDNEY DAMAGE

Carcinogenity: NTP Carcinogenity: IARC Carcinogenity: OSHA

Symptoms of Overexposure INHALATION: CAUSE THROAT

> IRRITATION, DIZZINESS, DROWSINESS, HEADACHE& NAUSEA. THERE ALSO BE BLOOD PRESSURE DEPRESSION, CARDIAC SENSI TIZATION & VENTRICULAR ARRHYTHMIA. SKIN & EYE:SKIN DEFATTING & DRYING, EYE IRRITATION, CORNEAL

DAMAGE. INGESTION: CAUSES GASTRIC D

Medical Cond. Aggrevated by Exposure ACUTE & CHRONIC LIVER DISEASE, RHYTHM

DISORDERS OF THE HEART, SKIN DISORDERS &

RESPIRATORY DISODERS

#### SECTION VII - Precautions for Safe Handling and Use

#### SECTION VIII - Control Measures

Respiratory Protection NIOSH-APPROVED MASK FOR ORGANIC VAPORS IF

> VENTILATION IS NOTSUFFICIENT TO KEEP VAPORS WELL BELOW EXPOSURE LIMITS

Ventilation LOCAL VENT IS PREFERRED & RECOMMENDED.

GENERAL ROOM VENT IS SATISFACTORY KEEP

LEVELS LOW

Protective Gloves SOLVENT RESISTANT,

Eye Protection GOGGLES GLASSES W/SIDESHIELDS

Supplemental Health/Safety Data 1ST AID: EYES: FLUSH W/WATER 15 MIN. GET MEDICAL ATTENTION. SKIN:WASH W/WATERLESS CLEANER, FOLLOWED BY SOAP & WATER WASH. INHALATION:REMOVE AFFECTED PERSONS TO FRESH AIR. INGESTION:DO NOT INDUCE VOMITING. CONSULT PHYSICIAN IMMEDIATELY

Disposal Code

0

#### SECTION IX - Label Data

Protect	Eye	YES
Protect	Skin	YES
Protect	Respiratory	YES
Chronic	Indicator	YES
Contact	Code	SEVERE
Fire .Cod	le	UNKNOWN
Health C	ode	UNKNOWN
React Co	ode	UNKNOWN

## SECTION X - Transportation Data

Container Quantity	1
Unit of Measure	GT.

#### SECTION XI - Site Specific/Reporting Information

Volatile Organic Compounds (P/G)	0
Volatile Organic Compounds (G/L)	0

#### **SECTION XII - Ingredients/Identity Information**

Ingredient #	01
Ingredient Name	METHYL CHLOROFORM (1,1,1-TRICHLOROETHANE)
CAS Number	71556
NIOSH Number	N/R
Proprietary	NO
Percent	73
ACGIH TLV	350 PPM

## **ATTACHMENT 2**

ATSDR ToxFAQ for 1,1,1,-Trichloroethane



## 1,1,1-TRICHLOROETHANE

CAS # 71-55-6

## Division of Toxicology and Environmental Medicine ToxFAQs<sup>TM</sup>

**July 2006** 

This fact sheet answers the most frequently asked health questions (FAQs) about 1,1,1-trichloroethane. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to 1,1,1-trichloroethane usually occurs by breathing contaminated air. It is found in building materials, cleaning products, paints, and metal degreasing agents. You are not likely to be exposed to large enough amounts to cause adverse health effects. Inhaling high levels of 1,1,1-trichloroethane can cause you to become dizzy and lightheaded. Exposure to much higher levels can cause unconsciousness and other effects. This substance has been found in at least 823 of the 1,662 National Priorities List sites identified by the Environmental Protection Agency (EPA).

## What is 1,1,1-trichloroethane?

1,1,1-Trichloroethane is a synthetic chemical that does not occur naturally in the environment. It also is known as methylchloroform, methyltrichloromethane, trichloromethylmethane, and  $\alpha$ -trichloromethane. Its registered trade names are chloroethene NU® and Aerothene TT®.

No 1,1;1-trichloroethane is supposed to be manufactured for domestic use in the United States after January 1, 2002 because it affects the ozone layer. 1,1,1-Trichloroethane had many industrial and household uses, including use as a solvent to dissolve other substances, such as glues and paints; to remove oil or grease from manufactured metal parts; and as an ingredient of household products such as spot cleaners, glues, and aerosol sprays.

# What happens to 1,1,1-trichloroethane when it enters the environment?

- ☐ Most of the 1,1,1-trichloroethane released into the environment enters the air, where it lasts for about 6 years.
- ☐ Once in the air, it can travel to the ozone layer where sunlight can break it down into chemicals that may reduce the ozone layer.
- ☐ Contaminated water from landfills and hazardous waste sites can contaminate surrounding soil and nearby surface water or groundwater.
- From lakes and rivers, most of the 1,1,1-trichloroethane evaporates quickly into the air.

- Water can carry 1,1,1-trichloroethane through the soil and into the groundwater where it can evaporate and pass through the soil as a gas, then be released to the air.
- Organisms living in soil or water may also break down 1,1,1-trichloroethane.
- ☐ It will not build up in plants or animals.

#### How might I be exposed to 1,1,1-trichloroethane?

- ☐ Breathing 1,1,1-trichloroethane in contaminated outdoor and indoor air. Because 1,1,1-trichloroethane was used so frequently in home and office products, you are likely to be exposed to higher levels indoors than outdoors or near hazardous waste sites. However, since 2002, 1,1,1-trichloroethane is not expected to be commonly used, and therefore, the likelihood of being exposed to it is remote.
- ☐ In the workplace, you could have been exposed to 1,1,1-trichloroethane while using some metal degreasing agents, paints, glues, and cleaning products.
- ☐ Ingesting contaminated drinking water and food.

#### How can 1,1,1-trichloroethane affect my health?

If you breathe air containing high levels of 1,1,1-trichloroethane for a short time, you may become dizzy and lightheaded and possibly lose your coordination. These effects rapidly disappear after you stop breathing contaminated air. If you breathe in much higher levels, you may become unconscious, your blood pressure may decrease, and your heart may stop beating. Whether breathing low levels of 1,1,1-trichloroethane for a long

## 1,1,1-TRICHLOROETHANE

CAS # 71-55-6

## ToxFAQs<sup>TM</sup> Internet address is http://www.atsdr.cdc.gov/toxfaq.html

time causes harmful effects is not known. Studies in animals show that breathing air that contains very high levels of 1,1,1-trichloroethane damages the breathing passages and causes mild effects in the liver, in addition to affecting the nervous system. There are no studies in humans that determine whether eating food or drinking water contaminated with 1,1,1-trichloroethane could harm health. Placing large amounts of 1,1,1-trichloroethane in the stomachs of animals has caused effects on the nervous system, mild liver damage, unconsciousness, and even death. If your skin contacts 1,1,1-trichloroethane, you might feel some irritation. Studies in animals suggest that repeated exposure of the skin might affect the liver and that very large amounts may cause death. These effects occurred only when evaporation was prevented.

# How likely is 1,1,1-trichloroethane to cause cancer?

Available information does not indicate that 1,1,1-trichloroethane causes cancer. The International Agency for Research on Cancer (IARC) and the EPA have determined that 1,1,1-trichloroethane is not classifiable as to its carcinogenicity in humans.

#### How can 1,1,1-trichloroethane affect children?

Children exposed to large amounts of 1,1,1-trichloroethane probably would be affected in the same manner as adults. In animals, it has been shown that 1,1,1-trichloroethane can pass from the mother's blood into a fetus. When pregnant mice were exposed to high levels of 1,1,1-trichloroethane in air, their babies developed more slowly than normal and had some behavioral problems. However, whether similar effects occur in humans has not been demonstrated.

# How can families reduce the risk of exposure to 1,1,1-trichloroethane?

Children can be exposed to 1,1,1-trichloroethane in household products, such as adhesives and cleaners. Parents should store household chemicals out of reach of young children to prevent accidental poisonings or skin irritation. Always store household chemicals in their original labeled containers. Never store household chemicals in containers that children would find attractive to eat or drink from, such as old soda bottles. Keep your Poison Control Center's number near the phone.

Sometimes older children sniff household chemicals in an attempt to get high. Your children may be exposed to 1,1,1-trichloroethane by inhaling products containing it. Talk with your children about the dangers of sniffing chemicals.

# Is there a medical test to show whether I've been exposed to 1,1,1-trichloroethane?

Samples of your breath, blood, and urine can be tested to determine if you have recently been exposed to 1,1,1-trichloroethane. In some cases, these tests can estimate how much 1,1,1-trichloroethane has entered your body. To be of any value, samples of your breath or blood have to be taken within hours after exposure, and samples of urine have to be taken within 2 days after exposure. However, these tests will not tell you whether your health will be affected by exposure to 1,1,1-trichloroethane. The exposure tests are not routinely available in hospitals and clinics because they require special analytical equipment.

# Has the federal government made recommendations to protect human health?

EPA regulates the levels of 1,1,1-trichloroethane that are allowable in drinking water. The highest level of 1,1,1-trichloroethane allowed in drinking water is 0.2 parts 1,1,1,-trichloroethane per 1 million parts of water (0.2 ppm).

The Occupational Safety and Health Administration (OSHA) has set a limit of 350 parts 1,1,1-trichloroethane per 1 million parts of air (350 ppm) in the workplace.

#### Reference

Agency for Toxic Substances and Disease Registry (ATSDR). 2006. Toxicological Profile for 1,1,1-Trichloroethane (Update). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

Where can I get more information? For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Environmental Medicine, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is http://www.atsdr.cdc.gov/toxfaq.html. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.